

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1, 4, 5, 10, 22, and 23 are pending in the present application, Claims 1, 4, 5, and 10 having been amended, Claims 2, 3, 6-9, and 11-21 having been canceled without prejudice or disclaimer, and Claims 22 and 23 having been added. Support for the amendment to Claim 1 is found, for example, in original Claim 2. Support for the amendment to Claim 5 is found, for example, in original Claim 6. Support for the amendments to Claims 4 and 10 is self-evident. Support for new Claims 22 and 23 is found, for example, in the original claims. Thus, no new matter is added.

In the outstanding Office Action, Claims 19 and 20 were rejected under 35 U.S.C. §101; Claim 20 was objected to; Claims 1-7, 10-15, 16, 17, and 19-21 were rejected under 35 U.S.C. §102(b) as anticipated by Chiang et al. (U.S. Patent No. 6,144,701, hereinafter Chiang); Claims 9 and 17 were rejected under 35 U.S.C. §103(a) as unpatentable over Chiang; and Claim 8 was objected to for depending from a rejected base claim, but was otherwise indicated as including allowable subject matter.

Applicants thank the Examiner for the indication of allowable subject matter.

With respect to the rejection of Claim 1 as anticipated by Chiang, Applicants respectfully submit that the amendment to Claim 1 overcomes this ground of rejection. Amended Claim 1 is directed toward a picture encoding method that includes: encoding the video signal using a reference picture signal in a frame memory to generate a video code stream; storing in the frame memory as the reference picture a local decoded picture signal generated in encoding the video signal; and encoding the reference picture signal read out from the frame memory to generate a reference picture code stream.

Chiang discloses that “The goal is to provide a compression scheme with multiple viewpoint capability while maintaining a backward compatibility with the current monoview MPEG compression scheme.”¹ In other words, Chiang discloses a technique to encode images captured at the same time from a plurality of different directions.

On the other hand, Claim 1 recites “encoding the video signal...to generate a video code stream” and “encoding the reference picture signal...to generate a reference picture code stream.” Thus, the claimed invention not only generates usual coded data (video code stream) by encoding each picture of a video image, but also generates encoded data (reference picture code stream) by encoding a reference picture used for encoding each picture. In other words, the claimed invention generates a reference picture code stream as well as a video code stream. Amended Claim 1 also recites “multiplexing the video code stream with the reference picture code stream to generate an output code stream.”

The claimed invention advantageously results in the coded data becoming robust against errors that occur at the time of transmission of the coded data. The video code stream generated in non-limiting embodiments of the claimed invention is coded data capable of reproducing the original image alone, and the reference picture code stream is redundant coded data.

On the contrary, Chiang discloses a technology to encode a stereoscopic image. The stereoscopic image cannot be played back only by one coded data.

Furthermore, Chiang does not disclose or suggest the effect of having robustness against error as described above. Chiang discloses encoding a stereoscopic image, left/right channel sequence 200/210 as the input, and affine transformation 255.² Therefore, it is obvious to a person of ordinary skill in the art that Chiang discloses a configuration in which input images are captured at the same time from a plurality of different directions.

The outstanding Office Action takes the position that “coder 225 must have a local memory for storing frame memory” because it is an MPEG encoder.³ However, Chiang does

¹ Chiang, col. 1, lines 38-41.

² Chiang, Fig. 2, and col. 2, lines 3-5.

³ Office Action, page 3.

not disclose or suggest encoding a local-decoded image (reference image), itself stored in a frame memory. Thus, Chiang does not disclose or suggest the claimed "storing in the frame memory as the reference picture a local decoded picture signal generated in encoding the video signal; [and] encoding the reference picture signal read out from the frame memory to generate an output code stream."

In view of the above-noted distinctions, Applicants respectfully submit that amended Claim 1 (and Claim 4 dependent thereon) patentably distinguishes over Chiang. Claims 5 and 22, although of different statutory classes, recite elements analogous to those of amended Claim 1. Thus, Applicants respectfully submit that Claims 5 and 22 (and Claims 10 and 23 dependent thereon) patentably distinguish over Chiang, for at least the reasons stated for Claim 1.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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